28 May 1981
JRB Rating: ___

Emergency Action Plan
L. E. CARPENTER CORP.
Wharton, New Jersey

On-Scene Coordinator: (To be established at time of funding availability.)
Prepared By: Richard W. Chapin, ER&HMI Branch TAT

I. Site Description, History, and General Information

Information utilized to prepare this Emergency Action Plan (EAP) was obtained from the U.S. EPA Region II, Office of Hazardous Waste and Emergency Response and Hazardous Materials Inspection Branch files. In addition, the site was visited on May 8, 1981

A. Description

1. L. E. Carpenter is engaged in the manufacturing of vinyl coated wall coverings and located in the Rockaway River's flood plain. Between 1965 and 1970 waste products from the plant were buried on the facilitie's property. In 1975, the discharge from a dewatering operation on the site caused a fish kill in the Rockaway River. It was during this incident that EPA became aware of groundwater contamination from improper waste disposal.

B. Security

1. The waste disposal area is on the plant's property, which is secured with a chain link fence. The area of buried drums is enclosed with a snow fence.

C. On-Going Activities

1. Since late 1975, L. E. Carpenter Corp. has retained an engineering consultant to address the problem. A proposal was submitted to the New Jersey Department of Environmental Protection (NJDEP) in October, 1979.

2. The proposal to deal with buried drums is part of an overall waste management plan for the facility. L. E. Carpenter proposed excavating the drums and contaminated soils and temporarily storing them on-site in a secured fashion (i.e. a lined storage cell on a paved area) above ground. Overall waste management plans call for construction of an on-site incinerator for disposal of liquid and solid wastes. Energy will be recovered for in plant use.

At a meeting with the plant's manager and chief engineer on May 8, 1981, it was indicated that L. E. Carpenter had received verbal approval for the drum excavation and storage on April 22, 1981 from NJDEP. The firm was prepared to start this clean up upon receipt of written confirmation. It was also indicated that L. E. Carpenter could have the incinerator on line by June, 1982 if the proposal went according to schedule.

II. Current Information on the Extent of Contamination

Waste products from the facility were buried on-site from 1965-1970. There is no estimate as to how many drums were deposited in the pit. (Present generation rate is 8 to 10 drums per week.) The drums are covered with local soil. In addition, drums of waste materials have been stored on-site since early 1979 due to the inability to locate a waste hauler. (A scavenger was employed to haul wastes off-site between 1970 and 1979.) Between 500 and 1000 drums are presently stored on-site.

The following is a list of materials, provided by L. E. Carpenter in 1975 to Jersey City Water Works, utilized at the facility: polyvinyl chloride resin, phthalate ester plasticizers, phosphate plasticizers, chlorinated paraffin plasticizers, epoxidized soy bean oil plasticizers, barium, cadmium and zinc stabilizing compounds, zinc borate, antimony oxide, naptha, pigments such as titanium dioxide, bis-tributyl-tin oxide (a fungicide), dyes, lauryl pentachlorophenate, methylethyl ketone, methyl-isobutyl ketone, xylene, and cyclohexanone.

Polyvinyl chloride waste sludge was indicated in 1976 to contain the following: polyvinyl chloride resin, phthalate plasticizers, chlorinated paraffins, phosphate plasticizers, xylene, naptha, color pigments, barium, cadmium and zinc stabilizers, zinc borate, antimony oxide and titanium dioxide.

A. Air

1. No problems or contamination reported in the files reviewed. None indicated at site visit of May 8, 1981.

B. Surface Water

1. Water samples from the Rockaway River taken after the 1975 fish kill (See III.C., Episodes) contained a mixture of xylene, paraffins, phthalate esters (all unquantified) and 0.006 ppm of mercury.

2. No reported sampling since 1975 episode.

C. Groundwater

1. The L. E. Carpenter Corp. is located in the 100 year flood plain of the Rockaway River. Soil underlying the facility is a granular unconsolidated glacial outwash. Bedrock is approximately 70 feet below land surface. Seasonal high water table lies 4 to 5 feet below the surface. Hydraulic connection between site and Rockaway River highly probable.

2. Plant engineer indicated in October, 1979 interview that the factory was built over an abandoned iron mine. Two 300 foot deep mine shafts are known to exist under facility.

3. In May 1979, the Wharton Water Works conducted routine sampling of their well #3 on Princeton Avenue, Wharton, in anticipation of possible use for public supply. Analysis showed 100 ppb of xylene. Two

subsequent analyses showed xylene at 2 ppb or less.

Well #3 is located more than one mile downstream of L. E. Carpenter and draws from the glacial outwash deposit. The relationship, if any, between well contamination and the L. E. Carpenter disposal area is undefined.

D. Soils

1. Soils proximate to drum pit contaminated. Extent of contamination unknown, although on May 8, 1981, the plant engineer indicated the rough estimate of soil requiring excavation is 1200 cubic yards.

III. Current Information on Human Health/Environmental Impacts

A. Site Safety Plan

1. No formal site safety plan has been developed.

B. Surveys, Studies, etc.

1. No known studies or documentation of adverse impacts on humans or animals.

C. Episodes

On January 29, 1975 a fish kill in the Rockaway River resulting from a discharge by the L. E. Carpenter Corp. occurred. The firm was excavating for the purpose of installing a storage tank and the excavation became flooded. On January 28, L. E. Carpenter began pumping out the excavation and this discharge to the Rockaway continued until the 29th when the fish kill was reported. The magnitude of the fish kill is not indicated in the material reviewed.

A sample of water from the excavation was found to contain xylene, toluene, substituted alkyl benzenes and traces of paraffins. The plant engineer indicated on January 30, 1975 that the materials had seeped into the excavation with groundwater from the surrounding ground.

Because L. E. Carpenter is located upstream of the Jersey City Water Works Boonton Reservoir, water samples from the reservoir were analyzed for organic contamination. No detectable (<0.1 ug/l) organic compounds were found at that time.

In addition to the waste disposal problem, L. E. Carpenter was subject to and in violation of 40 CFR 112 for not implementing a SPCC plan. EPA and L. E. Carpenter agreed to a $4000 penalty and a waiver of prosecution for failure to implement a plan in September, 1975.

D. Vectors of Exposure and Population at Risk

1. Potential for contaminated groundwater seepage into the Rockaway River represents an unknown hazard to customers of the Jersey City Water Works Boonton Reservoir.

2. Wells located in glacial deposits along the Rockaway undoubtedly draw river water, especially during low flow conditions. Population using these wells are at an unknown risk due to the possibility of induced infiltration of contaminated river water.

IV. Recommended Actions

Xylene and toluene are Superfund (Pub. L. 96-510) designated hazardous substances identified as being discharged to Rockaway River in 1975. The extent of contaminated groundwater flow into the river is unknown.

The corporation responsible for the contamination is actively taking actions to rectify the situation at their own expense and under the review of the NJDEP. Aside from monitoring progress to assure that it is satisfactory, no other action is recommended. EPA resources can be better utilized elsewhere.

L. E. Carpenter and NJDEP should be contacted once every 3 months to monitor progress. Plans for groundwater decontamination following drum pit excavation should be reviewed as soon as they are available.

V. Cost

Because no EAP actions are recommended, no cost estimate is required. In any event, all clean up costs, including those for remedial action, should be born by L. E. Carpenter Corp.

VI. Public Participation

None required.

VII. Interface With Remedial Phase Actions

Remedial phase actions have not been identified, or deemed necessary, at this juncture. Re-evaluation of the need for remedial action should be made following review of proposed groundwater decontamination.